Table I. Reference table for new L4 requirements for Subscription Service and suggested links.

L4 ID	L4 Text		RBR Text
		RBR ID	
<u>C-</u> <u>CSS-</u> <u>40270</u>	The Subscription Service shall accept the following requests from subscribers: submit new subscriptions, update subscriptions, and cancel subscriptions.	DADS0 498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
		DADS0 500#B	Each DADS shall receive changes to standing orders from the IMS.
<u>C-</u> <u>CSS-</u> <u>40280</u>	The Subscription Service shall accept the following requests from event producer: register new events, update events, cancel events, and trigger events.	DADS0 498#B	Each designated DADS shall receive standing and retrospective product orders from the IMS.
		DADS0 500#B	Each DADS shall receive changes to standing orders from the IMS.
<u>C-</u> <u>CSS-</u> 40290	The Subscription Service shall provide the capability to notify via direct program interface when the subscriber specified action has been taken.	DADS1 210#B	Each DADS shall prepare, for output to the collocated PGS, data availability notices.
		DADS1 020#B	Each DADS shall generate data retrieval status to acknowledge the receipt of a product order. The data retrieval status shall indicate the acceptance or rejection of the request. In the event of rejection, the status shall contain an indication of the reason for rejection (e.g., distribution parameters missing, data not present or unreadable).
		DADS0 540#B	Each DADS shall notify the PGS of the receipt of non-EOS data sets required for Standard Product production.
		DADS0 550#B	Each DADS shall notify the PGS of the receipt of EOS data sets required for Standard Product production (e.g., data received from non-collocated DADS).
<u>C-</u> <u>CSS-</u> <u>40300</u>	The Subscription Service shall provide the capability to notify subscriber via email upon occurrence of the event if no action has been specified.	DADS1 210#B	Each DADS shall prepare, for output to the collocated PGS, data availability notices.
		DADS1	Each DADS shall generate data retrieval status to acknowledge the

L4 ID	L4 Text	Rel. B	RBR Text
		ID	
		020#B	receipt of a product order. The data retrieval status shall indicate the acceptance or rejection of the request. In the event of rejection, the status shall contain an indication of the reason for rejection (e.g., distribution parameters missing, data not present or unreadable).
		DADS0 540#B	Each DADS shall notify the PGS of the receipt of non-EOS data sets required for Standard Product production.
		DADS0 550#B	Each DADS shall notify the PGS of the receipt of EOS data sets required for Standard Product production (e.g., data received from non-collocated DADS).
<u>C-</u> <u>CSS-</u> <u>40310</u>	The Subscription Service shall provide the capability to notify directly to a program interface upon occurrence of the event if no action has been specified.	DADS1 210#B	Each DADS shall prepare, for output to the collocated PGS, data availability notices.
		DADS1 020#B	Each DADS shall generate data retrieval status to acknowledge the receipt of a product order. The data retrieval status shall indicate the acceptance or rejection of the request. In the event of rejection, the status shall contain an indication of the reason for rejection (e.g., distribution parameters missing, data not present or unreadable).
<u>C-</u> <u>CSS-</u> 40320	The Subscription Service shall allow subscriber to specify the day of week to be notified for weekly time interval events.	DADS0 540#B	Each DADS shall notify the PGS of the receipt of non-EOS data sets required for Standard Product production.
		DADS0 550#B	Each DADS shall notify the PGS of the receipt of EOS data sets required for Standard Product production (e.g., data received from non-collocated DADS).
		DADS1 210#B	Each DADS shall prepare, for output to the collocated PGS, data availability notices.
		DADS1 020#B	Each DADS shall generate data retrieval status to acknowledge the receipt of a product order. The data retrieval status shall indicate the acceptance or rejection of the request. In the event of rejection, the status shall contain an indication of the reason for rejection (e.g., distribution parameters missing, data not present or unreadable).

L4 ID	L4 Text		RBR Text
		RBR ID	
<u>C-</u> <u>CSS-</u> 40330	The Subscription Service shall allow subscriber to specify the day of month to be notified for monthly time interval events.	DADS0 540#B	Each DADS shall notify the PGS of the receipt of non-EOS data sets required for Standard Product production.
		DADS0 550#B	Each DADS shall notify the PGS of the receipt of EOS data sets required for Standard Product production (e.g., data received from non-collocated DADS).
		DADS1 210#B	Each DADS shall prepare, for output to the collocated PGS, data availability notices.
		DADS1 020#B	Each DADS shall generate data retrieval status to acknowledge the receipt of a product order. The data retrieval status shall indicate the acceptance or rejection of the request. In the event of rejection, the status shall contain an indication of the reason for rejection (e.g., distribution parameters missing, data not present or unreadable).
<u>C-</u> <u>CSS-</u> 40340	The Subscription Service shall provide the capability for authorized users to delete all stored Subscription of a user	DADS0 500#B	Each DADS shall receive changes to standing orders from the IMS.
<u>C-</u> <u>CSS-</u> <u>40350</u>	The Subscription Service shall allow events to be triggered asynchronously.	IMS- 0740#B	The IMS shall provide the capability for users to generate and update requests for one-time orders or standing orders for the DADS to distribute DADS archive holdings to include, at a minimum, Standard Products, Standard Product software, EOC historical data, spacecraft housekeeping and ancillary data, and engineering data.
		IMS- 0920#B	The IMS shall provide the capability for users to construct and submit standing orders and one-time requests for processing of ECS data by pre-existing processes, which shall contain the following information at a minimum: a. Requester identification b. Algorithm input requirements c. Text description of need for processing d. Level 0-4 data set/subset e. Required time of generation f. Requested priority for product processing

L4 ID	L4 Text	Rel. B RBR	RBR Text
		ID	
			g. Resulting product type
			h. Processing parameters
		IMS-	The IMS shall accept requests for acquisition of data to be processed
		1080#B	one time or as standing orders.
C- CSS-	The Subscription Service shall provide	DADS0	Each DADS shall notify the PGS of the receipt of non-EOS data sets
	acknowledgment of receipt of a request after the	540#B	required for Standard Product production.
<u>40360</u>	request is submitted.		
		DADS0	Each DADS shall notify the PGS of the receipt of EOS data sets
		550#B	required for
			Standard Product production (e.g., data received from non-
		DADGI	collocated DADS).
		DADS1 210#B	Each DADS shall prepare, for output to the collocated PGS, data availability notices.
		DADS1	
		020#B	Each DADS shall generate data retrieval status to acknowledge the receipt of a product order. The data retrieval status shall indicate the
		020π D	acceptance or rejection of the request. In the event of rejection, the
			status shall contain an indication of the reason for rejection (e.g.,
			distribution parameters missing, data not present or unreadable).
C-	The Subscription Service shall provide a mechanism to	DADS0	Each DADS shall generate and send to SMC reports of the status of
<u>C-</u> <u>CSS-</u>	obtain state of the request (pending/ in progress/	927#B	the distribution of data.
40370	completed)		
C- CSS-	The Subscription Service shall provide a mechanism to	DADS0	Each DADS shall generate and send to SMC reports of the status of
CSS-	obtain the operation status upon completion.	927#B	the distribution of data.
40380	(succeeded/failed)		
C- CSS-	The Subscription Service shall provide a mechanism	IMS-	The IMS shall provide required maintenance of the IMS data bases,
CSS-	that allows the Subscription Service to be restarted and	0250#B	to include at a minimum:
<u>40390</u>	any requests that were in progress be restarted		a. Capability to restructure the data base
			b. Capability to interrupt a maintenance session and restart the
		T) (C	session without loss of information
<u>C-</u>	The Subscription Service shall allow subscribers to	IMS-	The IMS shall allow users to formulate a data order based on any

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L4 ID	L4 Text	Rel. E RBR ID	RBR Text
CSS- 40400 C- CSS- 40410	qualify a subscribable event based on a set of attributes specified by the event producer. The Subscription Service shall provide the capability to store subscriptions and event types persistently.	0770#B DADS0 660#B	combination of the inventory core metadata attributes and geophysical parameters at a minimum. Each DADS shall maintain a database of orders which shall include at a minimum: priorities, distribution directions, and all other details necessary to process orders including standing and multi-DADS orders.
<u>C-</u> <u>CSS-</u> <u>40420</u>	The Subscription Service shall validate subscriber's privileges to verify that the subscriber is authorized to perform the request.	IMS- 0760#B	The IMS shall access distribution criteria for each data product and data product software and compare the distribution criteria to the requester's data access rights to verify that the data and software can be distributed as requested.

Table II. Add table for new L4 requirements for Subscription Service.

L4 ID	object _key	rel	req_type	req_status	verification s_status	verificat ion_met hod	L4 Text
<u>C-</u> <u>CSS-</u> <u>40270</u>	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall accept the following requests from subscribers: submit new subscriptions, update subscriptions, and cancel subscriptions.
<u>C-</u> <u>CSS-</u> <u>40280</u>	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall accept the following requests from event producer: register new events, update events, cancel events, and trigger events.
<u>C-</u> <u>CSS-</u> <u>40290</u>	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall provide the capability to notify via direct program interface when the subscriber specified action has been taken.
<u>C-</u> <u>CSS-</u> 40300	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall provide the capability to notify subscriber via email upon occurrence of the event if no action has been specified.
<u>C-</u> <u>CSS-</u> 40310	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall provide the capability to notify directly to a program interface upon occurrence of the event if no action has been specified.
<u>C-</u> <u>CSS-</u> 40320	new	<u>B0</u>	functional	approved	<u>unverified</u>	<u>test</u>	The Subscription Service shall allow subscriber to specify the day of week to be notified for weekly time interval events.
<u>C-</u> <u>CSS-</u> <u>40330</u>	<u>new</u>	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall allow subscriber to specify the day of month to be notified for monthly time interval events.
<u>C-</u> <u>CSS-</u> <u>40340</u>	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall provide the capability for authorized users to delete all stored Subscription of a user
<u>C-</u> <u>CSS-</u> <u>40350</u>	new	<u>B0</u>	<u>functional</u>	approved	unverified	<u>test</u>	The Subscription Service shall allow events to be triggered asynchronously.

L4 ID	object _key	rel	req_type	req_status	verification s_status	verificat ion_met hod	L4 Text
<u>C-</u> <u>CSS-</u> <u>40360</u>	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall provide acknowledgment of receipt of a request after the request is submitted.
<u>C-</u> <u>CSS-</u> <u>40370</u>	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall provide a mechanism to obtain state of the request (pending/ in progress/ completed)
<u>C-</u> <u>CSS-</u> 40380	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall provide a mechanism to obtain the operation status upon completion. (succeeded/ failed)
<u>C-</u> <u>CSS-</u> <u>40390</u>	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall provide a mechanism that allows the Subscription Service to be restarted and any requests that were in progress be restarted
<u>C-</u> <u>CSS-</u> <u>40400</u>	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall allow subscribers to qualify a subscribable event based on a set of attributes specified by the event producer.
<u>C-</u> <u>CSS-</u> <u>40410</u>	new	<u>B0</u>	functional	approved	unverified	<u>test</u>	The Subscription Service shall provide the capability to store subscriptions and event types persistently.
<u>C-</u> <u>CSS-</u> <u>40420</u>	new	<u>B0</u>	functional security	approved	unverified	<u>test</u>	The Subscription Service shall validate subscriber's privileges to verify that the subscriber is authorized to perform the request.